

one, and a globular glass repeller on each of the others, will suffice. Where possible, the conductor should be kept far away from other metallic bodies, otherwise lateral discharges are likely to take place, since electric fluid, besides seeking a direct, avails itself also of a wide path. Where the vicinage of other conducting bodies is unavoidable, the possible passage of the fluid should be converted into a certainty by a metallic communication, and the other conducting train made complete; in any case it is advisable to convert, by strips of metal, the metallic bodies and surfaces about a building—such as copper or lead coverings, lead or iron rain-water pipes, &c., into continuous conductors, terminating in the ground. The top of the conductor may consist of a solid piece, say 2 feet long, tapering towards the ends from a thickness of 1½ inch in the middle, its upper end gilt or tipped and pointed with platinum, to preserve it from corrosion, the lower screwed into the mouth of the tubing. The conducting power of iron in relation to other metals is as follows:—lead, 1; tin, 2; iron, 2-4; zinc, 4; and copper, 12. Some further remarks on this subject will be found in *THE BUILDER*, vol. ii., p. 550.

PROGRESS OF THE BATHS AND WASH-HOUSES IN WHITECHAPEL.

Our recent notices of the baths and wash-houses at St. Pancras have reminded our readers of the existence of another scheme, commenced some time since under rather favourable auspices. The improvement of the condition of the working classes, fellow labourers with ourselves, is an object to which this journal is not less devoted, than to the advocacy of good methods of construction, and convenience in their dwellings. We should unite these objects were it not impossible to separate them. Consequently, when the first step was taken, just two years since, towards the establishment of the desirable institutions referred to, we were amongst those who looked anxiously for the good results, which were expected speedily to follow. We have taken some trouble to ascertain the position in which the project at present is, and though we are disposed to give some credit to the committee for an anxiety to make the model building in Goulstone-square perfect, we are not quite satisfied as to the reason of a delay, which is strangely at variance with the alacrity at first shown. We can never recommend in any case, that a building be commenced without proper advice, a well-considered plan, and great attention to convenience and stability,—any thing short of these would be opposed to the principles which this journal has constantly striven to inculcate,—but consistently with these requisites, there was certainly ample reason why the benefit of this project should be reaped as speedily as possible. The sympathies of the wealthy had been enlisted by veritable pictures of the lamentable state of misery, in which an immense number of persons existed, which was occasioned in some way or other, either by want of water, or the defective but expensive arrangement of their dwellings. It was found, that a great portion of this misery could be reduced by providing facilities for cleanliness elsewhere, and the discovery should have been turned to account at once.

The reports of the Health of Towns Commission, the speeches at the public meeting, and the documents themselves, issued by the committee, are painfully convincing of the truth of the assertions and the easiness of the remedy. The sympathy of the rich is liable to fail, unless some benefit be seen to result, and the expectations of the labouring classes, which the project had raised, should not have been disappointed. We know that the greatest anxiety prevails amongst the latter; but the effective co-operation of the former, we fear, has been endangered. The evils were so great, that their continuance for two years up to this time, and pending the completion of the model building, however desirable that may be, should not have been allowed in charitable England. If the project of baths and washhouses is to have the good effect which it ought to produce, the promoters should not rest till there are establishments at everybody's door. All London, in which the evils of their absence are known to be peculiarly prevalent, cannot go to Whitechapel

twelve months hence, or to St. Pancras now. Surely it would not have been impossible to fit up a few baths and washing-tubs in various quarters of the town, during the tardy completion of the model establishment. Such limited accommodation, we believe there is, or was in one instance, and the best results proceeded from it. The project of the committee has already been reduced from four model buildings, each of several stories in height, to one building of one story.

We are anxious to give the committee credit for what they have already done. The building in Goulstone-square is well built, and is fire-proof. We have no doubt that the novelty of the object occasioned many difficulties, which would not occur again, and so far everything seems to have been most carefully considered. But the building is only now being roofed in, and no definite time is looked forward to for the completion. Indeed the work was only commenced after the beginning of the present year, since which time there has been unexpected difficulty in the foundations, and delay in the supply of the castings during the hot weather, which stopped the works at several foudries.

The building occupies a square piece of ground, and is divided by walls into three parts. Half the area, at the back, is to be devoted to the washing department; the other half is divided into two equal parts, and will be for baths. The whole building is vaulted beneath, and this portion, which will be used principally for store rooms, will have to be lighted with gas. Beneath the baths on the north side is a large reservoir, which will be supplied with water from the New River Company's pipes. The rain-water, which is conveyed from the gutters by means of the hollow columns which support the roof, is not made use of for any purpose. The sides, the vaulting, and the bottom of the reservoir, and the piers which happen to stand within it, are coated with the Sessel asphalt, and the outer walls are tied together by iron rods, strongly nutted and screwed on the outside. The bottom of the reservoir has been formed of inverted arches, and has been contrived so that it can be readily cleaned when necessary—a drain being also provided for it for that purpose. The main drain is carried into that of the brewery adjoining. Had not leave been granted for this, that part of the work would have been of a very expensive nature, as there is no main sewer for some distance. In the basement beneath the washhouse, are two large boilers for the supply of hot water, and there is a steam-engine, by which the ventilating apparatus will be worked, and water pumped into a tank, in the centre of the building, at a sufficient elevation for the supply of the different departments. In the centre of the building is a circular chimney, which is enclosed by a wall, forming a square on the plan, on which rests the tank above-mentioned. The space between the circle and the square, forms the only means of communication between the different departments. The wall dividing the wash-house from the baths, is wholly in cement, as also are those parts of the external wall, which support the ends of the girders. The building, which we have said is of one story, has an iron roof, framed in divisions of about nine feet span each, which spring from hollow girders, about fourteen inches by ten inches, which also act as girders. These last, in the wash-house, are each supported by two columns, the length of the centre distance being about thirty-three feet, and at each end about twenty-three feet. The longer girder is trussed with an iron rod at each side. The upper part of each roof will be boarded and slated; the lower part will be glazed. There are also windows in the walls, the frames being in both cases of iron. The area of the wash-house is about eighty feet by fifty feet. It will be divided by slate partitions into compartments, perfectly independent of each other. The floor will be of slate, on arches. The entrance is entirely distinct from that to the baths.—The baths will be about 150 in number. They occupy the first half of the building.

The ventilation will be effected, partly by openings in the roof, and will be partly mechanical. So far as the arrangements can at present be understood, the fresh air will be admitted by a shaft at one angle of the building, from which it will be drawn by a machine,

and the foul air will be removed by the central shaft. The offices and check-taker's room are not yet developed; but they will not occupy a very large portion of the present area. The superintendent's house has not been commenced; it is to be built on a piece of ground on the north side. The principal elevation is of red brick, with white bricks as dressings to the windows; there is a stone cornice, and the whole is of very plain character. The state of the works, though not much advanced, is satisfactory as to construction. Indeed, no expense and care seem to have been spared, to render every thing as good as it can be made. The building is well worth a visit, and might give some useful hints to many of our younger readers, who may not often have the opportunity of seeing so much construction in iron-work. The architect is Mr. P. P. Baly, who superintended the construction of the Hungerford suspension-bridge, under Mr. Brunel. Mr. Piper is the contractor.

On the whole, we are induced to think that this building, if continued in the manner in which it has been commenced, will be satisfactory. But, although the novel nature of the purpose doubtless required an unusual degree of attention, we cannot see a satisfactory reason why, after an interval of two years, we should have to apprise our readers, that the benefits contemplated are still far from being attained. We cannot believe that the committee are unacquainted with the extent of the evils, which they have undertaken to remedy; but at the present rate of proceeding, the building promises to be as long in hand as the Nelson monument. We entreat the committee not to suppose there are greater difficulties than there really are; and we are sure that, could they look forward to the opening of the building with the same anxiety which is felt by many industrious families in the neighbourhood, a little more energy would be remarkable in the progress of the works, and that quite consistently with other requirements, as much desired by ourselves as by the committee. We trust that the speedy formation of many other establishments of the same kind, in every part of the metropolis and the kingdom, will not be lost sight of any longer.

MODIFICATION OF THE BUILDINGS ACT. PARTY TIMBER PARTITIONS.

THE following directions for a modification of the Act have just been issued by the Commissioners of Works and Buildings:—

"Whereas the official referees have by their report in writing, bearing date the twenty-seventh day of May, one thousand eight hundred and forty-six, certified to us that it is their opinion, that the rule in section 33 of the said Act, with regard to the party timber partitions of existing buildings, and any wall under or over the same, situated within the limits of the said Act, namely, 'That if one of the buildings be rebuilt, or if one of the fronts of any such building be taken down to the height of one story, or for a space equal to one-fourth of such front, from the level of the second floor upwards, then it shall be the duty of the building owner, and he is hereby required, to pull down such timber partitions, and the walls under or over the same; and, in lieu thereof, to build a proper party-wall,' will, if taken to the fullest sense, defeat some of the objects of the said Act; and that by the adoption of the modification of the said rule hereinafter directed, the objects of the said Act will be attained, either better or as effectually. And whereas the official referees have also stated in such report the grounds of such their opinion, and on the investigation thereof it appears to us, the said commissioners, that such opinion is well founded. Now we, the undersigned two of the Commissioners of Works and Buildings, pursuant to and in exercise of the power in that behalf given to us by the said recited Act, do direct, that the modification so recommended may be made by inserting after the section above quoted, the following words, *videlicet*, 'Nevertheless, if on special application in that behalf it be made to appear to the official referees, that for the purpose of public improvements by or under the sanction of parochial or other public authorities, it is expedient to permit the partial rebuilding of an irregular structure, without requiring the pulling down of all the portions thereof which are